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ERRATA.

Abstract No. 22, last line : *for* change, *read* charge.
No. 58, last line : *for* glass, *read* platinum.
No. 136, line 6 from end : *for* κ/λ, *read* λ/κ.
No. 180, line 3 : *for* turning, *read* tuning.
No. 187, line 2 from end : *for* C. P. Mathews, *read* C. P. Matthews.
No. 274, line 1 : *for* J. Bose, *read* J. Buse.
No. 385, line 3 from end : *for* specific gravity capacity, *read* specific capacity.
No. 511, line 3 from end : *for* from 30° to 120°, *read* from 30° to −120°.
No. 1050, line 3 : *for* (see 1900, Abstract No. 74), *read* (see 1900, Abstract No. 72).
No. 1225, line 2 : *for* pp. 68–80, *read* pp. 66–80.
No. 1229, line 1 : *for* E. Piérard, *read* J. Piérart.
No. 1229, line 2 from end : *for* T. Piérart *read* The author in reply.
No. 1481, line 9 : *for* at right action, *read* at right angles.
No. 1580, line 7 : *for* William, *read* Willans.
No. 1587, p. 601, line 2 : *for* trucks, *read* tracks.
No. 1679, line 2 : *for* Roy. Dublin Soc., Proc., *read* Roy. Dublin Soc., Trans.
No. 1817, line 1 : *for* Z. Gyözö, *read* Gyözö Zemplén.
No. 1979, line 1 : *for* Double Films, *read* Durable Films.
No. 1988, line 2 : *for* pp. 257–258, *read* pp. 251–258.
No. 2064, line 2 : *for* pp. 62–68, *read* pp. 62–79.
No. 2368, line 1 : *for* G. F. Walker, *read* S. F. Walker.

Erratum in Vol. II.

Abstract No. 1795, line 2 : *for* pp. 5–58, 1899. Discussion, pp. 59–80, *read* pp. 121–174, 1898. Discussion, pp. 175–205.

NOTE.—In the case of the Transactions of the American Institute of Electrical Engineers, the page numbers in the Abstracts refer to the monthly parts, and are therefore liable to be incorrect for the yearly volumes.

LIST OF JOURNALS.

In 1900 *Abstracts were made from the following Journals. An asterisk* (*) *indicates that Abstracts were only occasionally made from those so marked.*

Abbreviations.	Full Title.	Price.	Publishers, or Agents.
Acad. Sci. Cracovie, Bull.	Bulletin de l'Académie des Sciences de Cracovie	Single copy, 90 centimes; 8 francs per annum	Librairie de la Société anonyme polonaise. Cracovie
Acad. Sci. St. Pétersbourg, Bull....	Bulletin de l'Académie Impériale des Sciences de St. Pétersbourg	Single copy, 2 marks 50 pfennigs	Published by the Academy
Acad. Sci. St. Pétersbourg, Mém.	Mémoires de l'Académie Impériale des Sciences de St. Pétersbourg	Single copy, 3 marks.....	Published by the Academy
Accad. Lincei, Atti	Atti della R. Accademia dei Lincei, Roma	——	Published by the Academy
Accad. Sci. Torino, Atti.....	Atti della R. Accademia delle Scienze di Torino	——	Published by the Academy
Akad. Wiss. Wien, Sitzb.....	Sitzungsberichte der Mathematisch-Naturwissenschaftlichen Classe der Kaiserlichen Akademie der Wissenschaften, Wien	Single copies, 2s. 4d. to 7s. 6d.	Carl Gerold's Sohn, Barbaragasse 2, Vienna
Amer. Acad., Mem.	Memoirs of the American Academy of Arts and Sciences	——	American Academy of Arts and Sciences, 101–2, Beacon Street, Boston.
Amer. Acad., Proc.....	Proceedings of the American Academy of Arts and Sciences	——	Published by the Academy (as above)
Amer. Assoc., Proc.	Proceedings of the American Association for the Advancement of Science	——	Amer. Assoc. for the Advancement of Science, Salem, Mass., U.S.A.
Amer. Electn.	American Electrician	Single copy, 10 cents; $1 per annum	120, Liberty Street, New York.
Amer. Inst. Elect. Engin., Trans.	Transactions of the American Institute of Electrical Engineers	Single copy, 50 cents; $5 per annum	Published by the Institute, 26, Cortlandt Street, New York
Amer. Journ. Sci.	American Journal of Science.....	$6.40 per ann., post free	Tuttle, Morehouse & Taylor, 125, Temple Street, New Haven, Connecticut, U.S.A.
Amer. St. Rly. Assoc.....	Report of the American Street Railway Association	——	2020 State Street, Chicago
Ann. d. Physik	Annalen der Physik.....	38 marks per annum.....	J. A. Barth, Rossplatz 17, Leipzig
Annal. Chim. Phys.	Annales de Chimie et de Physique	36 francs per annum.....	Gauthier-Villars, Quai des Grands-Augus-

Abbreviations.	Full Title.	Price.	Publishers, or Agents.
Archiv Math. Phys.	Archiv der Mathematik und Physik	——	C. A. Koch's Verlagsbuchhandlung, Leipzig
Archiv Post, Tele.	Archiv für Post und Telegraphie	——	Published by the Reichs-Postamt, Berlin
Archives d'El. Médicale	Archives d'Electricité Médicale	22 francs per annum	O. Doin, Place de l'Odéon 8, Paris
Archives Néerlandaises	Archives Néerlandaises des Sciences Exactes et Naturelles	6 fl. per volume	Martinus Nijhoff, La Haye, Holland
Archives des Sciences	Archives des Sciences Physiques et Naturelles, Genève	Single copy, 2.50 francs; 25 francs per annum	Bureau des Archives, 18 Pélisserie, Geneva
Assoc. Ing. El. Liège, Bull.	Bulletin de l'Association des Ingénieurs-Electriciens, Liège	20 francs per annum	Gauthier-Villars, Quai des Grands Augustins 55, Paris
Assoc. Suisse Elect., Ann.	Annuaire de l'Association Suisse des Électriciens, Neuchâtel	——	J. Bollmann, Zurich, Switzerland
Astrophys. Journ.	Astrophysical Journal	Single copy, 50 cents; 18s. per annum	The University of Chicago Press, Chicago, and W. Wesley & Son, 28, Essex Street, Strand, W.C.
Automotor Journ.	Automotor and Horseless Vehicle Journal	Single copy, 6d.; 7s. per annum	F. King & Co., Ltd., 62, St. Martin's Lane, London, W.C.
*Ber.	Berichte der Deutschen Chemischen Gesellschaft	——	——
Bureau des Longitudes, Ann.	Annuaire publié par le Bureau des Longitudes	1 franc 50 centimes	Gauthier-Villars, Quai des Grands Augustins 55, Paris
*Calcutta Univ. Mag.	Calcutta University Magazine	Single copy, 3 annas	I. C. Bose & Co., Stanhope Press, 249, Bow-Bazar Street, Calcutta
Cambridge Phil. Soc., Proc.	Proceedings of the Cambridge Philosophical Society	Single copy, 2s. 6d.	C. J. Clay & Sons, Ave Maria Lane, E.C.
Cambridge Phil. Soc., Trans.	Transactions of the Cambridge Philosophical Society	Single copy, 7s. 6d.	C. J. Clay & Sons, Ave Maria Lane, E.C.
Canad. Elect. News	Canadian Electrical News	Single copy, 10 cents; $1 per annum	C. H. Mortimer Publishing Co., Ltd., Confederation Life Buildings, Toronto, Canada
Canad. Inst., Proc.	Proceedings of the Canadian Institute	——	Arbuthnot Bros. & Co., Lombard Street, Toronto, Canada
Cassier	Cassier's Magazine	Single copy, 1s.; 12s. per annum, post free	33, Bedford Street, Strand, W.C.
Centralblatt Accumulatoren- und Elementenk.	Centralblatt für Accumulatoren- und Elementenkunde	3 marks 50 pf. per quarter	W. Knapp, Halle a. S., Germany

LIST OF JOURNALS—*continued.*

ABBREVIATIONS.	FULL TITLE.	PRICE.	PUBLISHERS, OR AGENTS.
Chem. News	Chemical News and Journal of Science	Single copy, 4½d. post free	E. J. Davey, 6 & 7, Creed Lane, Ludgate Hill, E.C.
Chem. Soc., Journ.	Journal of the Chemical Society	——	Gurney & Jackson, 1, Paternoster Row, E.C.
Chem. Soc., Proc.	Proceedings of the Chemical Society	——	Gurney & Jackson, 1, Paternoster Row, E.C.
Comptes Rendus	Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences	34 francs per annum	Gauthier-Villars, Quai des Grands Augustins 55, Paris
Deutsch. Phys. Gesell., Verh.	Verhandlungen der Deutschen Physikalischen Gesellschaft	4 marks per annum	——
Deutsche Zeitschr. Elektrotechn.	Deutsche Zeitschrift für Elektrotechnik. (No longer published.)	2 marks quarterly	W. Knapp, Halle a. S., Germany
Écl. Électr.	L'Éclairage Électrique	60 fr. per ann., post free	G. Carré & C. Naud, 3, Rue Racine, Paris
Elect. Engin.	Electrical Engineer	Single copy, 3d.; 13s. per annum, post free	139 & 140, Salisbury Court, Fleet Street, E.C.
Elect. Rev.	Electrical Review (London)	Single copy, 4d.; 19s. 6d. per annum, post free	Alabaster, Gatehouse & Co., 4, Ludgate Hill, E.C.
Elect. Rev. N.Y.	Electrical Review (New York)	Single copy, 10 cents; $5 per annum	Times Buildings, 41, Park Row, New York, & H. W. Hall, 42, Old Broad St., London, E.C.
Elect. World and Engineer	Electrical World and Engineer	Single copy, 10 cents; $6 per annum	120, Liberty Street, New York, & Hastings House, Norfolk Street, Strand, London
Electrician	The Electrician	Single copy, 6d.; 26s. per annum	Salisbury Court, Fleet Street, E.C.
Électricien	L'Électricien	Single copy, 50 centimes; 25 francs per annum	L. de Soye et Fils, Rue des Fossés-St.-Jacques 18, Paris
Electricity, N.Y.	Electricity (New York)	Single copy, 10 cents; $4.50 per annum	136, Liberty Street, New York
Elekt. Runds.	Elektrotechnische Rundschau	12 marks per annum	10, Kaiserstrasse, Frankfurt a. M., Germany
Elektrochem. Zeitschr.	Elektrochemische Zeitschrift	18 marks 40 pfg. per ann.	M. Krayn, 86, Steglitzerstrasse, Berlin, W.
Elektrotechn. Zeitschr.	Elektrotechnische Zeitschrift	25s. per annum	J. Springer, 24, Monbijouplatz 3, Berlin
Elettricità, Milan	L'Elettricità (Milan)	Single copy, 25 centesimi; 18 lire per annum	Via Cusani 11, Milano, Italy
Engineer	The Engineer (London)	Single copy, 6½d. post free; £1 9s. per ann., post free	33, Norfolk Street, Strand, W.C.
Engineering	Engineering	Single copy, 6½d. post free; £1 9s. 2d. per annum.	35 & 36, Bedford Street, Strand, W.C.

Abbreviations.	Full Title.	Price.	Publishers, or Agents.
Eng. Club, Phil., Proc.	Proceedings of the Engineers' Club of Philadelphia	$2 per volume	1122, Girard Street, Philadelphia
Eng. Mag.	The Engineering Magazine	Single copy, 1s.; 12s. 6d. per annum, post free	222–225, Strand, London, W.C.
Eng. News	Engineering News	Single copy, 15 cents; $6.31 per annum	220, Broadway, New York, and Effingham House, 1, Arundel Street, Strand, London
Feilden	Feilden's Magazine	Single copy, 1s.; 12s. 6d. per annum, post free	Temple Chambers, Embankment, London, E.C.
Frank. Inst., Journ.	Journal of the Franklin Institute	Single copy, 50 cents; $5 per annum	Franklin Institute, Philadelphia
Génie Civil	Génie Civil	Single copy, 1 franc; 45 francs per annum	Rue de la Chaussée d'Antin 6, Paris
Gesell. Wiss. Göttingen, Nachr. Math.-Phys. Klasse	Nachrichten der Gesellschaft der Wissenschaften zu Göttingen, Mathematisch-physikalische Klasse	——	Lüder Horstmann, Göttingen, Germany
Horseless Age	The Horseless Age	Single copy, 10 cents; $4 per annum	E. P. Ingersoll, 150, Nassau St., New York
Ind. Élect.	L'Industrie Électrique	Single copy, 1 franc; 26 francs per annum	A. Lahure, 9, Rue de Fleurus, Paris
Ind. Électrochim.	L'Industrie Électrochimique	Single copy, 60 centimes; 8 francs per annum	H. Becker, 5, Rue Guy-Patin, Paris
Indus. and Iron	Industries and Iron. (No longer published.)	Single copy, 4½d. post free	39 & 40, Shoe Lane, E.C.
Inst. Civ. Engin., Proc.	Proceedings of the Institution of Civil Engineers	——	Published by the Institution, Great George Street, London, S.W.
Inst. Elect. Engin., Journ.	Journal of the Institution of Electrical Engineers	Single copy varies from 1s. 6d. to 7s. 6d.	E. & F. N. Spon, 125, Strand, London, W.C.
Inst. Engin. and Shipbuilders, Trans.	Transactions of the Institution of Engineers and Shipbuilders in Scotland	——	Published by the Institution, 207, Bath Street, Glasgow
Inst. Mech. Engin., Proc.	Proceedings of the Institution of Mechanical Engineers	——	Published by the Institution, Storey's Gate, St. James's Park, London, S.W.
Journal of Electricity, S. F.	Journal of Electricity, Power, and Gas (San Francisco)	Single copy, 10 cents ...	315, Cherry Street, San Francisco, Cal., U.S.A.
Journ. Phys. Chem.	Journal of Physical Chemistry	$4 per annum	Published at Cornell University
Journ. de Physique	Journal de Physique	15 fr. per ann., post free	11, Rue Rataud, Paris

ABBREVIATIONS.	FULL TITLE.	PRICE.	PUBLISHERS, OR AGENTS.
Journ. Télégraph.	Journal Télégraphique	Single copy, 50 centimes; 5 francs per annum	Berne, Switzerland
Light Rly. and Tramway Journ.	Light Railway and Tramway Journal	Single copy, 1s.; 10s. per annum	16, Eldon Street, London, E.C.
Lightning	Lightning	Single copy, 2d.; 10s. 6d. per annum	8, Bream's Buildings, Chancery Lane, W.C.
Locomotion Automobile	La Locomotion Automobile	Single copy, 5 centimes; 20 francs per annum	Place de la Madeleine, Rue Chauveau-Lagarde 4, Paris
Manchester Lit. and Phil. Soc., Mem.	Memoirs of the Manchester Literary and Philosophical Society	Single copy, 2s.	36, George Street, Manchester
Mech. Eng.	The Mechanical Engineer	Single copy, 6d.; 20s. per annum, post free	53, New Bailey Street, Manchester
Monthly Weather Rev.	The Monthly Weather Review	Single copy, 10 cents	Published by the U.S. Weather Bureau, Washington
N. Cimento	Nuovo Cimento (Pisa)	18 lire per annum	P. Salvioni, Tipografia Pieraccini, Via de Monte 12, Pisa
Nature	Nature	Single copy, 6d.	Macmillan & Co., Ltd., St. Martin's Street, London, W.C.
Nova Scotian Inst., Trans.	Transactions of the Nova Scotian Institute of Science	——	Published by the Institute, Halifax, Nova Scotia
Phil. Mag.	London, Edinburgh, & Dublin Philosophical Magazine	2s. 6d. per month, occasionally 5s.	Taylor & Francis, Red Lion Court, Fleet Street, E.C.
Phys. Rev.	Physical Review	Single copy, 50 cents; $4 per annum	Macmillan & Co., Ltd., London and New York
Phys. Soc., Proc.	Proceedings of the Physical Society of London	——	Taylor & Francis, Red Lion Court, Fleet Street, E.C.
Phys. Zeitschr.	Physikalische Zeitschrift	5 Mk. per quarter, or 25 Mk. per ann., post free	S. Hirzel, Königstrasse 2, Leipzig
Preuss. Akad. Wiss. Berlin, Sitzb.	Sitzungsberichte der Preussischen Akademie der Wissenschaften zu Berlin	12 marks per annum	Königliche Akademie der Wissenschaften, Berlin
Railroad Gazette	Railroad Gazette	$6.08 per ann., post free	32, Park Place, New York
Revue de l'El, Berne	Revue de L'Électricité, Berne	8 francs per annum	Place de l'Ours 29, Berne
Revue Int. d'Électrothérapie	Revue Internationale d'Électrothérapie et	Single copy, 50 centimes;	3, Place du Théatre Français, Paris

Abbreviations.	Full Title.	Price.	Publishers, or Agents.
Revue Scientif.	Revue Scientifique	Single copy, 60 centimes ; 35 francs per annum	19, Rue des Saints Pères, Paris, and T. F. Unwin, 11, Paternoster Square, E.C.
Rivista Sci.-Industriale	Rivista Scientifico-Industriale	12 lire per annum	2, Lungarno della Zecca, Firenze, Italy
*Roy. Astro. Soc., Monthly Notices	Monthly Notices of the Royal Astronomical Society	——	——
Roy. Dublin Soc., Proc.	Scientific Proceedings of the Royal Dublin Society	Single copy, 6d.	Published by the Society, Leinster House, Dublin
Roy. Dublin Soc., Trans.	Transactions of the Royal Dublin Society	——	Published by the Society, Leinster House, Dublin
Roy. Inst., Proc.	Proceedings of the Royal Institution of Great Britain	——	Published by the Institution, 21, Albemarle Street, W.
Roy. Soc. Canada, Proc.	Proceedings of the Royal Society of Canada	——	——
Roy. Soc. N. S. Wales, Journ. and Proc.	Journal and Proceedings of the Royal Society of New South Wales	——	5, Elizabeth Street, Sydney, New South Wales
Roy. Soc., Phil. Trans.	Philosophical Transactions of the Royal Society of London	Varies for separate papers, from 1s.	Dulau & Co., 37, Soho Square, London, W.
Roy. Soc., Proc.	Proceedings of the Royal Society of London	Varies for separate parts, from 1s. 6d.	Dulau & Co., 37, Soho Square, London, W.
Roy. Soc. Queensland, Proc.	Proceedings of the Royal Society of Queensland	——	Pole & Co., 95, Elizabeth Street, Brisbane
Schweizerische Blätter für Elektro-technik	Schweizerische Blätter für Elektrotechnik, Berne	8 francs per annum	Place de l'Ours 29, Berne
Science	Science	Single copy, 15 cents	Macmillan & Co.,66,Fifth Avenue,New York
Scientific American	Scientific American	Single copy,8cents; 16s.5d. per annum, post free	361, Broadway, New York
Scientific Australian	Scientific Australian	2s. 6d. per annum, post free	Turner & Henderson, 16–18, Hunter Street, Adelaide
Soc. Arts Journ.	Journal of the Society of Arts	Single copy, 6d.	G. Bell & Sons, York St., Covent Garden, W.C.
Soc. Belge Élect., Bull.	Bulletin de la Société Belge d'Électriciens	Single copy, 2 francs ; 20 frs. per ann., post free	54, Rue Froissart, Brussels
Soc. Chem. Ind., Journ.	Journal of the Society of Chemical Industry	30s. per annum	Published by the Society, 9, Bridge Street, Westminster, S.W.
Soc. Franç. Phys., Bull	Bulletin de la Société Française de Physique	——	Published by the Society 44, Rue de Rennes, Paris
Soc. Franç. Phys., Séances	Séances de la Société Française de Physique	——	Published by the Society (as above)

LIST OF JOURNALS—*continued.*

ABBREVIATIONS.	FULL TITLE.	PRICE.	PUBLISHERS, OR AGENTS.
Soc. Imp. Nat. Moscou, Bull.	Bulletin de la Société Impériale des Naturalistes de Moscou	——	J. N. Kouchnereff & Co., Pimenowskaia, Moscou
Soc. Int. Élect.. Bull.	Bulletin de la Société Internationale des Electriciens	Single copy, 2.50 francs ; 27 francs per annum	Gauthier - Villars, Quai des Grands-Augustins 55, Paris
Street Rly. Journ.	Street Railway Journal	Single copy, 50 cents ; $6 per annum, post free	A. C. Shaw, Hastings House, Norfolk Street, Strand, W.C.
Street Rly. Rev.	Street Railway Review	Single copy, 30 cents ; $4 per annum	Windsor and Kenfield Publishing Co., Monon Building, Chicago
Tech. Versuch. Berlin, Mitth.	Mittheilungen der Technischen Versuchanstalten zu Berlin	12 marks per annum.....	J. Springer, 24, Monbijouplatz 3, Berlin
Tram. Rly. World	Tramway and Railway World	Single copy, 1s. post free	Amberley House, Norfolk Street, W.C.
U.S. Weather Bureau, Bull.....	Bulletin of the United States Weather Bureau	——	Published by the U.S. Weather Bureau, Washington
West. Electn.	Western Electrican (Chicago)	Single copy, 10 cents ; $3 per annum	510, Marquette Buildings, Chicago, and 44, Fleet Street, London, E.C.
Zeitschr. Elektrochem.	Zeitschrift für Elektrochemie	4 marks per quarter	W. Knapp, Halle a. S., Germany
Zeitschr. Elektrotechn., Wien.....	Zeitschrift für Elektrotechnik (Wien)	30 fr. per ann., post free	Nibelungengasse 7, Vienna
Zeitschr. Instrumentenk.	Zeitschrift für Instrumentenkunde		
Zeitschr. Instrumentenk., Beib. ...	Beiblatt zur Zeitschrift für Instrumentenkunde	20 marks per annum.....	J. Springer, 24, Monbijouplatz 3, Berlin
Zeitschr. Phys. Chem.	Zeitschrift für Physikalische Chemie	Single copy about 4s. 3d.	W. Engelmann, Leipzig
Zeitschr. Vereines Deutsch. Ing.	Zeitschrift des Vereines Deutscher Ingenieure	Single copy, 1 mark 40 pfg. ; 32 marks per annum, post free	J. Springer, Monbijouplatz 3, Berlin

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